

REMARKS

Claims 1, 2, 5-13, and 16-22 are pending in the present application.

The rejection of Claims 1, 2, 5-13, and 16-22 under 35 U.S.C. §103(a) over Yip in view of Bender and Bedford is respectively traversed.

The present invention provides a process for producing a fresh fish egg product or a milt product in which the fresh fish egg or milt is treated with an aqueous alkali solution and the aqueous alkali solution is washed off or neutralized, as well as a product obtained thereby (see Claims 1, 12, 21, and 22). In the outstanding Office Action, the Examiner has maintained the rejection of the claims as being obvious over the combined disclosures of Yip, Bender and Bedford. Applicants continue to disagree with this rejection for the reasons of record in the response filed on August 8, 2005. Applicants further submit that perhaps the biggest deficiency in the combined disclosures of the prior art is that the Examiner continues to misapply Bender. The Examiner continues to rely upon Bender for disclosing the treatment of fish with an aqueous alkali solution and, now, the Examiner cites Bedford for the specific alkali solution. Applicants submit that this reliance is somewhat misguided.

Bender is most specifically concerned with preservation of fish flesh. Bedford relates to preservation of viscera for the purpose of recovering vitamin-bearing oil. However, contrary to the assertions by the Examiner, Applicants note in each of Bender and Bedford, egg and milt (i.e., sperm) are not specifically disclosed or suggested in any manner. Since the viscera includes many internal organs of varying degrees of delicacy and Bender and Bedford fail to disclose or suggest any interest in preserving eggs or milt, Applicants submit that the skilled artisan would not have any reason to consider that the solutions disclosed in Bender and Bedford would be useful as presently claimed. Further, Applicants submit that when the

foregoing is considered there would be no motivation to combine the disclosures of Bender and Bedford with that of Yip.

The foregoing deficiency in the disclosure of the prior art and the failure to disclose or suggest egg or milt is further emphasized by the following. The Examiner appears to allege the egg and milt are a part of the viscera. However, egg and milt (i.e., sperm) are not actually "internal organs" within the definition of "viscera," but rather are reproductive cells (see Example 1 and any conventional reference text). Therefore, the combined disclosures of the prior art do not disclose or suggest the subject matter of the presently claimed invention and cannot affect the patentability of the same.

Accordingly, Applicants offer the following summary of the general deficiencies in the prior art disclosures. In regard to Yip, Applicants note that this reference is deficient for at least two reasons. First, as recognized by the Examiner, Yip fails to disclose or suggest washing off or neutralizing the aqueous alkali solution on the treated at least one fish egg or milt. Second, Yip does not disclose or suggest treating fish roe with the alkali recited in Claim 1. At best, Yip provides alkali metal sulfites and citrates, which are not present in the claimed invention. Therefore, based on the disclosure of Yip, the skilled artisan would not have any expectation that treating fish roe with the alkali recited in Claim 1 provide enhanced commercial value to ovaries or eggs of salmon and the like caught at a later time (see page 4, lines 7-10).

Moreover, as stated above, Yip fails to disclose or suggest the washing off step, as well as the neutralization of the remaining alkali solution after the alkali solution treatment. Failure to include one of these steps results in the remaining alkali denaturalizing the surface membrane of the eggs or milt causing deterioration in the freshness and quality of the eggs or milt. For example, the egg membrane produced by a method that fails to incorporate either

the claimed washing or neutralization are highly susceptible to breakage causing the eggs and milt to crush or collapse.

Conventionally eggs that have been harvested from fish caught late in the season, the eggs would have to be either thrown away or used as fish food (see page 2, lines 18-25). However, by the method of the present invention, the eggs can be revived as a new egg product. Further, even for fresh eggs harvested from fish in season, the eggs can be maintained in a fresher state and the membrane can be strengthened. Thus, the life of the egg product can be extended (see Example 2). Moreover, in Example 1 and Comparative Example 1 Applicants have demonstrated the substantial differences in the egg products obtained from the present invention and that obtained by a method in which washing step is omitted, respectively

At least in an attempt to compensate for the first deficiency in the disclosure of Yip, the Examiner cites Bender. However, Bender fails to compensate for this deficiency since this reference merely relates to the treatment of fish, not to eggs or milt (i.e., sperm), which are reproductive cells not “internal organs” within the definition of “viscera.” For example, Bender discloses that fish are treated after the fish are eviscerated (see column 3, lines 40-49; column 4, lines 4-6; and column 4, lines 65-68). The Examiner argues that Bender discloses washing fish “either whole, eviscerated, or filleted condition.” However, the Examiner is again reminded that the claims relate to washing fish eggs or milt, *not* fish flesh. At no point does Bender disclose or suggest that the internal organs are treated.

Further, Bender discloses that among the various phosphates, some specific orthophosphates are useful for retarding bacterial contamination on fish meat. However, Bender does not disclose or suggest the use of the specifically claimed alkali solution as presently claimed.

In addition, the invention of Bender resides in the finding that among the various phosphates some specific orthophosphate is useful for retarding bacteria contamination of fish flesh. Bender, however, neither discloses nor suggests that the specific alkali solutions of the present invention are useful for this purpose. Further, Bender fails to disclose or suggest the importance of the washing step or the neutralization step.

The Examiner cites Bedford for disclosing dry alkalis in the preservation of fish viscera. However, Bedford is plagued by the same problem as highlighted above for Yip. Namely, Bedford fails to disclose or suggest the washing off step, as well as the neutralization of the remaining alkali solution after the alkali solution treatment. Failure to include one of these steps results in the remaining alkali denaturalizing the surface membrane of the eggs or milt causing deterioration in the freshness and quality of the eggs or milt. In addition, Bedford also fails to disclose or suggest treatment of eggs or milt (i.e., sperm), which are reproductive cells not “internal organs” within the definition of “viscera.” Therefore, this disclosure is unrelated to the presently claimed invention.

Finally, Applicants again remind the Examiner that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art *also suggests the desirability of the combination* (MPEP §2143.01). In this case, no such motivation can be found in Yip, Bender, or Bedford.

Moreover, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation... to modify the reference... Second, there must be a reasonable expectation of success. Finally, the prior art reference... must teach or suggest all the claim limitations.” (MPEP §2142) For the reasons set forth above, the even if the artisan were to combine the disclosures of Yip, Bender, and Bedford the skilled artisan would have no reasonable expectation of the advantages flowing from the

claimed invention (see Example 1 and Comparative Example 1). And, as noted above, the combined disclosures would still fail to disclose or suggest washing off or neutralizing the aqueous alkali solution on the treated at least one fish egg or milt, as well as the specific identity of the alkali solution.

In view of the foregoing, Applicants request withdrawal of this ground of rejection.

The rejection of Claims 21 and 22 under 35 U.S.C. §112, second paragraph, is obviated by amendment.

Applicants have amended the claims to address the Examiner's specific criticism. Therefore, this ground of rejection is believed to be moot.

Withdrawal of this ground of rejection is requested.

Applicants submit that the present application is in condition for allowance. Early notification to this effect is respectfully requested.

Respectfully submitted,

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